

# Analysis in the Hydrogen Program

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DOE Hydrogen Program Annual Review  
May 9-11, 2000  
Livermore, CA

## **Role of Analysis in the DOE Hydrogen Program:**

- Ensure that Federal R&D investments in hydrogen production, storage, distribution, and end-use technologies will provide the *maximum value added to national strategic goals including global greenhouse gas mitigation.*
- *Identify and evaluate key market segments and market entry conditions* for hydrogen utilization in transportation and in electricity generation at distributed and remote locations.
- Develop and apply metrics to *measure the Program's contribution* to attaining national strategic energy goals and market share in key market segments.

*-From: Strategic Plan for DOE Hydrogen Program, January 1998*

# Strategic Objectives of Hydrogen Analysis

*From: Strategic Plan for DOE Hydrogen Program, January 1998*

Portfolio analysis to define market criteria to guide R&D investments

- Hydrogen as a competitive fuel in transportation
- Enhance global competitive leadership in hydrogen technology development

Characterize key market segments and define pathways

- Market size
- End-use patterns
- Cost/performance
- Consumer requirements/preferences
- Return on investment (private and public)
- Regulations

Perform technical and economic analyses

- Guide research
- Identify opportunities for hydrogen technologies

Develop programmatic database

- Metrics
- Cost/performance/reliability of hydrogen technologies

## **Enhanced Analysis Planning**

### **Analysis coordinator will hold two parallel types of workshops**

#### *Expert committee*

Industry representatives, HTAP, NHA, DOE, other H2 activities coordinators

Review analysis plan, make recommendations to DOE and analysis coordinator

#### *Analysts*

Present new ideas

Peer review

Integrate efforts

### **Study of previous analyses conducted for H2 Program**

Will provide institutional knowledge

Will give a better understanding of the gaps in analysis

Used in analysis workshops

### **Periodic reports on analysis activities will be prepared**

## **Current Analysis Solicitation**

Applications received by March 31, 2000

Five Areas:

- 1: Technical analysis of currently funded projects
- 2: Technical analysis of hydrogen production systems not currently funded by DOE
3. Dissemination of information
4. Codes and standards analysis
5. Technical analysis on matters being considered by the International Energy Agency